		Exploring Aeror	nautics
		2003 Science	ce
		Content Stand	lards
New Mexico Science			
Grade 5			
Activity/Lesson	State	Standards	
			Use graphic representations (e.g., charts,
			graphs, tables, labeled diagrams) to present
Fundamentals of			data and produce explanations for
Aeronautics (145-176)	NM	SCI.5.I.I.I.3	investigations.
			Understand that when a force (e.g., gravity,
Fundamentals of	N.18.4	00151111114	friction) acts on an object, the object speeds up,
Aeronautics (145-176)	NM	SCI.5.II.I.III.4	slows down, or goes in a different direction.
Airmlana Cambral/000			Understand that when a force (e.g., gravity,
Airplane Control(209-	NIN 4	00151111114	friction) acts on an object, the object speeds up,
256)	NM	SCI.5.II.I.III.4	slows down, or goes in a different direction.
			Use appropriate technologies (e.g., calculators,
Tools of			computers, balances, spring scales, microscopes) to perform scientific tests and to
Aeronautics(257-326)	NM	SCI.5.I.I.I.2	collect and display data.
Aeronaulics(257-320)	INIVI	301.3.1.1.1.2	Know that air is a substance that surrounds
			Earth (atmosphere), takes up space, and
Tools of			moves, and that temperature fluctuations and
Aeronautics(257-326)	NM	SCI.5.II.III.II.2	other factors produce wind currents.
Acionaulics(201-020)	INIVI	001.0.11.111.11.2	Understand that when a force (e.g., gravity,
			friction) acts on an object, the object speeds up,
How an Airplane Flies	NM	SCI.5.II.I.III.4	slows down, or goes in a different direction.
110W dill/tilpidile i ileo	I VIVI	001.0.11.1111.4	Understand that different kinds of investigations
			are used to answer different kinds of questions
			(e.g., observations, data collection, controlled
Science of Flight	NM	SCI.5.I.I.II.1	experiments).
			Understand that scientific conclusions are
Science of Flight	NM	SCI.5.I.I.II.2	subject to peer and public review.
			Use graphic representations (e.g., charts,
			graphs, tables, labeled diagrams) to present
Integrating with			data and produce explanations for
Aeronautics	NM	SCI.5.I.I.I.3	investigations.
			Understand that different kinds of investigations
			are used to answer different kinds of questions
Intro to Aeronautics			(e.g., observations, data collection, controlled
(109-123)	NM	SCI.5.I.I.II.1	experiments).
Intro to Aeronautics			
(109-123)	NM	SCI.5.I.I.III.2	Use mathematical skills to analyze data.
Intro to Aeronautics			Make predictions based on analyses of data,
(109-123)	NM	SCI.5.I.I.III.3	observations, and explanations.
			Plan and conduct investigations, including
			formulating testable questions, making
Scientific Method(124-		001	systematic observations, developing logical
144)	NM	SCI.5.I.I.1	conclusions, and communicating findings.
			Use appropriate technologies (e.g., calculators,
Colombific Matter - 1/404			computers, balances, spring scales,
Scientific Method(124-		00151110	microscopes) to perform scientific tests and to
144)	NM	SCI.5.I.I.I.2	collect and display data.

Scientific Method(124-144)	NM	SCI.5.I.I.II.1	Understand that different kinds of investigations are used to answer different kinds of questions (e.g., observations, data collection, controlled experiments). Describe the contributions of science to
Scientific Method(124-144)	NM	SCI.5.III.I.1.1	understanding local or current issues (e.g., watershed and community decisions regarding water use).
		Exploring Aero	nautics
		2003 Scien	
		Content Stand	dards
New Mexico Science			
Grade 6			
Activity/Lesson	State	Standards	
Fundamentals of Aeronautics (145-176)	NM	SCI.6.I.I.1.1	Construct appropriate graphs from data and develop qualitative and quantitative statements about the relationships between variables being investigated.
Fundamentals of Aeronautics (145-176)	NM	SCI.6.II.I.III.1	Know that every object exerts gravitational force on every other object dependent on the masses and distance of separation (e.g., motions of celestial objects, tides).
Airplane Control(209-256)	NM	SCI.6.II.I.III.1	Know that every object exerts gravitational force on every other object dependent on the masses and distance of separation (e.g., motions of celestial objects, tides).
How an Airplane Flies	NM	SCI.6.II.I.III.1	Know that every object exerts gravitational force on every other object dependent on the masses and distance of separation (e.g., motions of celestial objects, tides).
How an Airplane Flies	NM	SCI.6.II.I.III.2	Know that gravitational force is hard to detect unless one of the objects (e.g., Earth) has a lot of mass.
The Activity Center	NM	SCI.6.II.I.III.1	Know that every object exerts gravitational force on every other object dependent on the masses and distance of separation (e.g., motions of celestial objects, tides).
Science of Flight	NM	SCI.6.I.I.I.3	Justify predictions and conclusions based on data.
Ocionos of Elitati		001011110	Understand that scientific investigations use common processes that include the collection of relevant data and observations, accurate measurements, the identification and control of variables, and logical reasoning to formulate
Science of Flight	NM	SCI.6.I.I.II.2	hypotheses and explanations. Construct appropriate graphs from data and develop qualitative and quantitative statements
Integrating with Aeronautics	NM	SCI.6.I.I.I.1	about the relationships between variables being investigated.

Fundamentals of Aeronautics (145-176)	NINA	SCI.8.II.I.III.F.2	Know that a force has both magnitude and direction.
Activity/Lesson	State	Standards	
Grade 8	Ctata	04	
New Mexico Science			
		Content Standa	ards
		2003 Scienc	
	1	Exploring Aerona	autics
177)	INIVI	301.7.1.1.111.2	investigations.
Scientific Method(124-144)	NM	SCI.7.I.I.III.2	investigations.
Scientific Mathod/124			Use mathematical expressions to represent data and observations collected in scientific
144)	NM	SCI.7.I.I.II.2	hypothesis.
Scientific Method(124-		001711110	Critique procedures used to investigate a
144)	NM	SCI.7.I.I.II.1	investigation and conclusions.
Scientific Method(124-		00171111	Describe how bias can affect scientific
Scientific Method(124-144)	NM	SCI.7.I.I.I.1	collect information, inform investigations, and answer a scientific question or hypothesis.
			Use a variety of print and web resources to
(109-123)	NM	SCI.7.I.I.III.2	investigations.
Intro to Aeronautics			and observations collected in scientific
,			Use mathematical expressions to represent data
(109-123)	NM	SCI.7.I.I.1.1	answer a scientific question or hypothesis.
Intro to Aeronautics			collect information, inform investigations, and
J -			Use a variety of print and web resources to
Science of Flight	NM	SCI.7.I.I.II.2	hypothesis.
CS.O.100 O. F. light		00	Critique procedures used to investigate a
Science of Flight	NM	SCI.7.I.I.I.1	answer a scientific question or hypothesis.
			collect information, inform investigations, and
7 toronautios	I AIVI	001.7.1.1.1.2	Use a variety of print and web resources to
Aeronautics	NM	SCI.7.I.I.I.2	variables being investigated.
The Tools of	INIVI	301.1.1.1.2	Use models to explain the relationships between
Aeronautics(257-326)	NM	SCI.7.I.I.I.2	Use models to explain the relationships between variables being investigated.
Activity/Lesson Tools of	State	Standards	Liso models to explain the relationships between
Grade 7	State	Standards	
New Mexico Science			
Nam Manie - O-i-		Content Standa	aras
		2003 Scienc	
		Exploring Aerona	
144)	NM	SCI.6.I.I.II.2	hypotheses and explanations.
Scientific Method(124-			variables, and logical reasoning to formulate
			measurements, the identification and control of
			relevant data and observations, accurate
			common processes that include the collection of
			Understand that scientific investigations use
Aeronautics	NM	SCI.6.I.I.II.2	hypotheses and explanations.
Integrating with			variables, and logical reasoning to formulate
			measurements, the identification and control of
			relevant data and observations, accurate
			common processes that include the collection of
			relevant data and observations, accurate

			Analyze the separate forces acting on an object
			at rest or in motion (e.g., gravity, elastic forces,
			friction), including how multiple forces reinforce
Fundamentals of		20101111150	or cancel one another to result in a net force that
Aeronautics (145-176)	NM	SCI.8.II.I.III.F.3	acts on an object.
			Know that an object's motion is always
Fundamentals of		0010111111111	described relative to some other object or point
Aeronautics (145-176)	NIVI	SCI.8.II.I.III.M.7	(i.e., frame of reference).
			Objects in motion will continue in motion and
Fundamentals of	N 1 N 4	SCI.8.II.I.III.M.8.	objects at rest will remain at rest unless acted
Aeronautics (145-176)	NIVI	a	upon by an unbalanced force (inertia).
Cundomontolo of			If a superton female is appolited to an object of
Fundamentals of	N IN A		If a greater force is applied to an object a
Aeronautics (145-176)	INIVI	b	proportionally greater acceleration will occur.
Fundamentals of		CCI O II I III M O	If an abject has more mass the effect of an
	NINA		If an object has more mass the effect of an applied force is proportionally less.
Aeronautics (145-176)	INIVI	С	Know how to use density, boiling point, freezing
			point, conductivity, and color to identify various
Wings(177-208)	NM	SCI.8.II.I.I.PM.1	substances.
vvilig5(177-200)	INIVI	301.0.11.1.11 101.1	Analyze the separate forces acting on an object
			at rest or in motion (e.g., gravity, elastic forces,
			friction), including how multiple forces reinforce
Airplane Control(209-			or cancel one another to result in a net force that
256)	NM	SCI.8.II.I.III.F.3	acts on an object.
230)	INIVI	301.0.11.1.111.1	Know that an object's motion is always
Airplane Control(209-			described relative to some other object or point
256)	NM	SCI.8.II.I.III.M.7	(i.e., frame of reference).
200)	14101	001.0.11.11.11.11.11	Objects in motion will continue in motion and
Airplane Control(209-		SCI.8.II.I.III.M.8.	
256)	NM	a	upon by an unbalanced force (inertia).
Airplane Control(209-			If a greater force is applied to an object a
256)	NM	b	proportionally greater acceleration will occur.
Airplane Control(209-		1 -	If an object has more mass the effect of an
256)	NM	С	applied force is proportionally less.
,			Know that there are fundamental forces in
			nature (e.g., gravity, electromagnetic forces,
How an Airplane Flies	NM	SCI.8.II.I.III.F.1	nuclear forces).
			Analyze the separate forces acting on an object
			at rest or in motion (e.g., gravity, elastic forces,
			friction), including how multiple forces reinforce
			or cancel one another to result in a net force that
How an Airplane Flies	NM	SCI.8.II.I.III.F.3	acts on an object.
			Objects in motion will continue in motion and
		SCI.8.II.I.III.M.8.	objects at rest will remain at rest unless acted
How an Airplane Flies	NM	а	upon by an unbalanced force (inertia).
		SCI.8.II.I.III.M.8.	If a greater force is applied to an object a
How an Airplane Flies	NM	b	proportionally greater acceleration will occur.
		SCI.8.II.I.III.M.8.	If an object has more mass the effect of an
How an Airplane Flies	NM	С	applied force is proportionally less.
The Tools of			
Aeronautics	NM	SCI.8.I.I.III.2	Create models to describe phenomena.

			Know that there are fundamental forces in nature (e.g., gravity, electromagnetic forces,
The Activity Center	NM	SCI.8.II.I.III.F.1	nuclear forces).
,			Know that a force has both magnitude and
The Activity Center	NM	SCI.8.II.I.III.F.2	direction.
			Objects in motion will continue in motion and
		SCI.8.II.I.III.M.8.	objects at rest will remain at rest unless acted
The Activity Center	NM	а	upon by an unbalanced force (inertia).
			Use a variety of technologies to gather, analyze
Science of Flight	NM	SCI.8.I.I.I.2	and interpret scientific data.
		SCI.8.II.I.III.M.8.	If a greater force is applied to an object a
Science of Flight	NM	b	proportionally greater acceleration will occur.
		SCI.8.II.I.III.M.8.	If an object has more mass the effect of an
Science of Flight	NM	С	applied force is proportionally less.
			Analyze the separate forces acting on an object
			at rest or in motion (e.g., gravity, elastic forces,
			friction), including how multiple forces reinforce
Integrating with			or cancel one another to result in a net force that
Aeronautics	NM	SCI.8.II.I.III.F.3	acts on an object.
			Objects in motion will continue in motion and
Integrating with		SCI.8.II.I.III.M.8.	objects at rest will remain at rest unless acted
Aeronautics	NM	а	upon by an unbalanced force (inertia).
Integrating with			If a greater force is applied to an object a
Aeronautics	NM	b	proportionally greater acceleration will occur.
Integrating with		SCI.8.II.I.III.M.8.	If an object has more mass the effect of an
Aeronautics	NM	С	applied force is proportionally less.
			Analyze the separate forces acting on an object
			at rest or in motion (e.g., gravity, elastic forces,
			friction), including how multiple forces reinforce
Intro to Aeronautics			or cancel one another to result in a net force that
(109-123)	NM	SCI.8.II.I.III.F.3	acts on an object.
			Objects in motion will continue in motion and
Intro to Aeronautics		SCI.8.II.I.III.M.8.	objects at rest will remain at rest unless acted
(109-123)	NM	a	upon by an unbalanced force (inertia).
Intro to Aeronautics		l.	If a greater force is applied to an object a
(109-123)	NM	b	proportionally greater acceleration will occur.
Scientific Method(124-	II.		Use a variety of technologies to gather, analyze
144)	NM	SCI.8.I.I.I.2	and interpret scientific data.